IN THE CLAIMS

Please add claim 26.

1. (Cancelled)

2. (Previously Presented) A distributed computer system comprising:

links; and

end stations coupled between the links, wherein types of end stations include endnodes which originate or consume frames and routing devices which route frames between the links and do not originate or consume frames, wherein the end stations include a first source endnode which originates frames at a variable injection rate, wherein the first source endnode includes:

a congestion control mechanism responding to detected congestion by multiplicatively decreasing the variable injection rate.

3. (Previously Presented) The distributed computer system of claim 2 wherein the variable injection rate (IR) is multiplicatively decreased according to IR(i +1) = IR(i) * 1/F1, wherein F1 is a constant.

4. (Previously Presented) The distributed computer system of claim 2 wherein the congestion control mechanism responds to detected subsiding of congestion by multiplicatively increasing the variable injection rate.

5. (Previously Presented) The distributed computer system of claim 4 wherein the variable injection rate (IR) is multiplicatively increased according to IR(i +1) = IR(i) * F2, wherein F2 is a constant.

6. (Previously Presented) The distributed computer system of claim 2 wherein the end stations include a first destination endnode which consumes frames originated from the first source endnode, wherein the first destination endnode includes:

a congestion control mechanism detecting congestion on a path the frames route from the first source endnode to the first destination endnode.

7. (Previously Presented) The distributed computer system of claim 6 wherein the first destination endnode's congestion control mechanism detects congestion based on Forward Explicit Congestion Notification (FECN) conditions, and forwards the FECN conditions to the first source endnode.

8. (Previously Presented) The distributed computer system of claim 2 wherein the end stations include a first destination endnode which consumes frames originated from the first source endnode, wherein the first source endnode's congestion control mechanism detects congestion on a path the frames route from the first source endnode to the first destination endnode by monitoring a previous variable injection rate and a round trip time for a frame to reach the first destination endnode and an acknowlegement (ACK) for the frame from the first destination endnode to reach the first source endnode.

9. (Previously Presented) The distributed computer system of claim 2 wherein the first source endnode's congestion control mechanism detects congestion on a path the frames route from the first source endnode by monitoring acknowlegement (ACK) timeouts.

10. (Previously Presented) The distributed computer system of claim 2 wherein at least one routing device includes:

a congestion control mechanism detecting congestion on a path the frames route through the at least one routing device.

11. (Previously Presented) The distributed computer system of claim 10 wherein the at least one routing device includes receive and send port resources, and wherein the at least one routing device's congestion control mechanism detects congestion by analyzing the receive and send port resources.

12. (Previously Presented) The distributed computer system of claim 2 wherein at least one routing device includes:

a congestion control mechanism responding to detected congestion by dropping frames that are marked droppable for a time period.

13. (Previously Presented) The distributed computer system of claim 2 wherein at least one routing device includes:

a congestion control mechanism responding to detected congestion by applying link back pressure by reducing a number of credits available for routing frames though the routing device from a link.

14. (Previously Presented) A method of controlling congestion in a distributed computer system having links and end stations coupled between the links, wherein types of end stations include endnodes which originate or consume frames and routing devices which route frames between the links and do not originate or consume frames, the method conmprising:

originating, from a first source endnode, frames at a variable injection rate;

detecting congestion; and

multiplicatively decreasing the variable injection rate in response to the detected congestion.

15. (Previously Presented) The method of claim 14 wherein multiplicatively decreasing the variable injection rate includes multiplicatively decreasing the variable injection rate (IR) according to IR(i +1) = IR(i) * 1/F1, wherein F1 is a constant.

16. (Previously Presented) The method of claim 14 further comprising:

detecting subsiding of congestion; and

multiplicatively increasing the variable injection rate in response to the detected subsiding of congestion.

17. (Previously Presented) The method of claim 16 wherein multiplicatively increasing the variable injection rate includes multiplicatively increasing the variable injection rate (IR)

according to IR(i +1) = IR(i) * F2, wherein F2 is a constant.

18. (Previously Presented) The method of claim 14 further comprising:

consuming, at a first destination endnode, frames originated from the first source endnode; and

detecting congestion on a path the frames route from the first source endnode to the first destination endnode.

19. (Previously Presented) The method of claim 18 wherein the detecting congestion on the path the frames route from the first source endnode to the first destination endnode includes detecting congestion based on Forward Explicit Congestion Notification (FECN) conditions, and the method further comprises:

forwarding the FECN conditions to the first source endnode.

20. (Previously Presented) The method of claim 14 further comprising:

consuming, at a first destination endnode, frames originated from the first source endnode; and

detecting congestion on a path the frames route from the first source endnode to the first destination endnode by monitoring a previous variable injection rate and a round trip time for a frame to reach the first destination endnode and an acknowlegement (ACK) for the frame from the first destination endnode to reach the first source endnode.

21. (Previously Presented) The method of claim 14 wherein the detecting includes detecting congestion on a path the frames route from the first source endnode by monitoring acknowlegement (ACK) timeouts.

22. (Previously Presented) The method of claim 14 further comprising:

detecting congestion on a path the frames route through the at least one routing device.

23. (Previously Presented) The method of claim 22 wherein the at least one routing device includes receive and send port resources, and the detecting congestion on a path the frames route through the at least one routing device includes analyzing the receive and send port resources.

24. (Previously Presented) The method of claim 14 further comprising:

dropping frames that are marked droppable for a time period in response to the detected congestion.

25. (Previously Presented) The method of claim 14 further comprising:

applying link back pressure by reducing a number of credits available for routing frames though the routing device from a link in response to the detected congestion.

26. (New) A distributed computer system comprising:

links; and

end stations coupled between the links, wherein types of end stations include endnodes which originate or consume frames and routing devices which route frames between the links and do not originate or consume frames, wherein the end stations include a first source endnode which originates frames at a variable injection rate, wherein at least one routing device includes a congestion control mechanism responding to detected congestion by dropping frames that are marked droppable for a time period, and wherein the first source endnode includes:

a congestion control mechanism responding to detected congestion by multiplicatively decreasing the variable injection rate and responding to detected subsiding of congestion by multiplicatively increasing the variable injection rate.